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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,459	11/10/2005	David J. Chatting	36-1947	3817
23117	7590	04/14/2008	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			ENTIEZARI, MICHELLE M	
ART UNIT	PAPER NUMBER			
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/556,459	CHATTING ET AL.
	Examiner MICHELLE ENTEZARI	Art Unit 2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10 November 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/15/06

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

Claim 7 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 7 is drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

“Data structures not claimed as embodied in a computer-readable medium are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer.”

“Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure’s functionality to be realized.”

Claim 7, while defining a computer program, does not define a “computer-readable medium” and is thus non-statutory for that reasons. A computer program can range from paper on which the program is written, to a program simply contemplated

and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory, for example through combination with Claim 8.

"In contrast, a claimed computer-readable medium encoded with the data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." - MPEP 2106.IV.B.1(a)

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 3, 5-11, and 13 – 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Massarsky (US 6,385,628).

In regard to Claims 1, 7, 8, and 9, Massarsky discloses a system and method of generating a caricatured image ("Method for simulating the creation if an artist's drawing or painting of a caricature, and device for accomplishing same", Title), comprising the steps of: receiving an input image to be caricatured ("providing an image fixing device... fixing the image", Col 1, lines 45-55; image may be provided by video camera, which can capture either a live image or an image of a photograph placed in front of the video camera, or the image can be input to computer as a digital file, Col 5, lines 30-35); identifying feature areas on the input image and applying

respective caricaturing transformations to the identified feature areas in the input image so as to generate a caricatured image comprising the transformed feature areas (image area partitioned into triangular sub-regions, Col 5, lines 45-50; assigning control points and moving these control points to alter the image, Col 1, lines 45-60, control points chosen by an artist with knowledge of warping process and anticipated visual effect, Col 6, lines 10-20).

In regard to Claims 2 and 10, Massarsky discloses a system and method according to claims 1 and 9, wherein the caricaturing transformations comprise at least one of a scaling transformation and/or a translation transformation (each sub-region is altered in shape, position and alignment by repositioning triangle vertices, Col 5, lines 55-65; warping effect produced by moving control points to a new location, change the size and shape of the seven triangles, Col 6, lines 40-60).

In regard to Claims 3 and 11, Massarsky discloses a system and method according to claim 1 and 9, wherein the applying step further comprises, for a point in the input image, determining in which of the identified feature areas the point lies; and calculating the position which the point should take within the caricatured image as a function of the characteristics of the determined feature area within the input image, or of the characteristics of a corresponding feature area within another image (image area divided into triangular sub-regions, Col 5, lines 45-50; image sub-region is altered in shape, position and alignment by a simple repositioning of the triangle vertices, the

image sub-region contained within the triangle is stretched and moved in accordance with the change in the bounding triangle, Col 5, lines 55-65; a pattern of triangles are mapped out on the captured images, and a lattice of control points is assigned according to where the vertices of the mapped triangles are located, Col 6, lines 10 – 15; choose visual transformations that are visually identifiable to customers as facial features or facial expressions expressing recognizable moods, Col 6, lines 15-20; the warping effect is accomplished by increasing or decreasing the distance between two or more predetermined control points, in effect, reassigning or moving predetermined control points to a new location, Col 6, lines 40-45).

In regard to Claims 5 and 13, Massarsky discloses a system and method according to claims 1 and 9, and further comprising determining a caricature level defining the amount of caricaturing to be applied to the input image in dependence on the intended size of the caricature image to be generated; and applying the caricaturing transformations in dependence on the determined caricature level (each sub-region is altered in shape, position and alignment by repositioning triangle vertices, Col 5, lines 55-65; warping effect produced by moving control points to a new location, change the size and shape of the seven triangles, Col 6, lines 40-60).

In regard to Claims 6 and 14, Massarsky discloses a system and method according to claims 1 and 9 in which the input image comprises an image of a subject face, the identified feature areas each containing a particular facial feature (control

points are chosen by an artist with knowledge of the warping process in anticipation of the visual effect produced, visual transformations selected that are visually identifiable to customers as facial features or facial expressions expressing recognizable moods, Col 6, lines 10 – 20, partitioning of face into facial areas shown in Figure 4).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Massarsky (US 6,385,628) as applied to claims 3 and 11 above, and further in view of Kwak (US 2002/0018595).

Massarsky discloses a system and method according to claims 3 and 11.

Massarsky does not disclose storing a reference image having predefined feature areas, wherein the identifying step further identifies feature areas on the input image or on the other image corresponding to the predefined feature areas on the

reference image, and wherein said characteristics comprise one or more ratios of the dimensions of the determined feature area within the input image, or of the corresponding feature area within the other image, to the corresponding feature area in the reference image.

Kwak discloses storing a reference image having predefined feature areas (The databases may store data about eyes, noses and mouths with various characteristics, Paragraph [0012], wherein the identifying step further identifies feature areas on the input image or on the other image corresponding to the predefined feature areas on the reference image, and wherein said characteristics comprise one or more ratios of the dimensions of the determined feature area within the input image, or of the corresponding feature area within the other image, to the corresponding feature area in the reference image. (calculations are made as to a face to eye ratio, a face to nose ratio and a face to mouth ratio, thereby determining relative sizes of the eyes, nose and mouth to the area of the face in the photograph, ratios are directly applied to the face shape to be employed in the caricature, determined as stated above, ratios of the reactive elements are determined, Paragraph [0024]).

Massarsky and Kwak are in the same field of caricaturing (Massarsky, title, Kwak, title). It would have been obvious at the time of the invention to one skilled in the art to combine the ratio setting as described by Kwak with the caricature creating described by Massarsky, because the ratios assist in the controlled deformation of

facial images, and because Kwak cites it would be easy for a user to access a caricature and create it (Page 1, Paragraphs [0007] - [0009]).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELLE ENTEZARI whose telephone number is (571)270-5084. The examiner can normally be reached on M-Th, 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle Entezari/
Examiner, Art Unit 2624

/Jingge Wu/

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Supervisory Patent Examiner, Art Unit 2624